

Appln No. 09/578,355

Amdt date February 23, 2004

Reply to Office action of October 22, 2003

REMARKS/ARGUMENTS

In the Office action dated October 22, 2003, the Examiner rejected all of the then pending claims, claims 19 - 53. Claim 22 was rejected under 35 U.S.C. § 112. Claims 27, 35, 43 and 51 were objected to under 37 C.F.R. 1.75(c). Claims 19 - 24, 30 - 32, 38 - 40 and 46 - 48 were rejected under 35 U.S.C. § 102. Claims 25 - 29, 33 - 37, 41 - 45 and 49 - 53 were rejected under 35 U.S.C. § 103.

By this Amendment, Applicant has canceled claim 22. Reconsideration and reexamination are hereby requested for claims 19 - 21 and 23 - 53 that are now pending in this application.

Request for Acknowledgment of Receipt of Priority Documents

On May 24, 2000, Applicant submitted a certified copy of a priority document (Japanese patent Application No. 11-148317 which was filed on May 27, 1999) to the U.S. Patent Office. Applicant requests that the Examiner acknowledge that the Office has received this priority document (e.g., on FORM PTO-326) or notify Applicant that the Office has not received this document.

Request for Acknowledgment of Information Disclosure Statements

Applicant submitted Information Disclosure Statements to the U.S. Patent Office on May 24, 2000, on November 22, 2002 and on December 6, 2002. For the Examiner's convenience, copies of the transmittal forms and the FORMS PTO/SB/08A/B for these Information Disclosure Statements are attached as an Appendix to this Amendment. Applicant requests that initialed copies of the

Appln No. 09/578,355

Amdt date February 23, 2004

Reply to Office action of October 22, 2003

FORMS PTO/SB/08A/B be entered in the application file and returned to Applicant with the next communication from the Office in accordance with MPEP § 609.

Response to the Rejection of Claim 22 Under 35 U.S.C. § 112

The Examiner rejected claim 22 under 35 U.S.C. § 112, first paragraph. Applicant has canceled claim 22, without prejudice.

Response to the Rejection of the Claims Under 37 C.F.R. 1.75(c)

The Examiner objected to claims 27, 35, 43 and 51 under 37 CFR 1.75(c) "as being in improper form because a multiple dependent claims 28, 36, 44 and 52. See MPEP § 608.01(n)."

Applicant respectfully submits that this rejection should be withdrawn because none of the pending claims are in multiple dependent form. For example, claim 27 recites: "An audio system according to claim 26." Claim 26 recites: "An audio system according to claim 25." Claim 25 recites: "An audio system according to claim 19." Claim 19 is independent. Claim 28 also recites: "An audio system according to claim 26."

Accordingly, Applicant submits that these claims are in proper form. If the Examiner has any further questions or issues in this regard, Applicant requests that the Examiner contact Applicant's undersigned representative at the telephone number listed below.

Response to the Rejection of the Claims Under 35 U.S.C. § 102

The Examiner rejected claims 19 - 24, 30 - 32, 38 - 40 and 46 - 48 under 35 U.S.C. § 102(b) as being unpatentable over

Appln No. 09/578,355

Amdt date February 23, 2004

Reply to Office action of October 22, 2003

Yanagawa, U.S. Patent No. 5,128,999. Claims 19, 30, 38 and 46 are independent. Claims 20, 21, 23 and 24 are dependent on claim 19. Claim 22 has been canceled. Claims 31 and 32 are dependent on claim 30. Claims 39 and 40 are dependent on claim 38. Claims 47 and 48 are dependent on claim 46.

Yanagawa does not disclose "delaying" an "audio signal in accordance with" "distance" as claimed in independent claims 19, 30, 38 and 46.

Claims 19 and 38 recite, in part: "delaying said branched audio signal in accordance with at least one distance between said reproduction points."

Claims 30 and 46 recite, in part: "delaying said added audio signal in accordance with the distance from said given reproduction point to said predetermined reproduction points located far from said given reproduction point."

In contrast, as best understood Yanagawa discloses a sound field correcting apparatus that adjusts delay times of audio signals based on amplitudes of two channels (L_t and R_t). See, for example, the following quotes from the Yanagawa specification:

"The delay times are controlled in accordance with the steering emphasis detection signal as a control signal which is supplied to the control terminal." Column 3, lines 64 - 67.

"The steering emphasis detection signal is an output signal of the threshold switching circuit 24 in FIG. 2. The threshold switching circuit 24 discriminates the steering emphasis in the following manner." After which is described calculations based on "mean values" of sums, differences and divisions of L_t and R_t .

Appln No. 09/578,355

Amdt date February 23, 2004

Reply to Office action of October 22, 2003

Column 4, line 52 - column 5, line 13, specifically Equations 1

- 3

From the above it is apparent that the steering emphasis detection signal is based on the amplitudes (mean values) of L_t and R_t .

In view of the above, Yanagawa does not disclose every element of claims 19, 30, 38 and 46. Accordingly, Applicant respectfully submits that the section 102 rejection based on Yanagawa be withdrawn.

Claims 20, 21, 23, 24, 31, 32, 39, 40, 47 and 48 that depend on claims 19, 30, 38 and 46 also are novel over the cited references for the reasons set forth above. In addition, these dependent claims are novel over these references for the additional limitations that the dependent claims contain.

Response to the Rejection of the Claims Under 35 U.S.C. § 103

The Examiner rejected claims 25 - 29, 33 - 37, 41 - 45 and 49 - 53 under 35 U.S.C. § 103(a) as being unpatentable over Yanagawa, U.S. Patent No. 5,128,999, in view of Kuusama et al., U.S. Patent No. 6,332,026. Claims 25 - 29, 33 - 37, 41 - 45 and 49 - 53 are dependent on independent claims 19, 30, 38 and 46, respectively.

Neither Yanagawa nor Kuusama et al., considered either separately or in combination, teach or suggest "delaying" an "audio signal in accordance with" "distance" as claimed in independent claims 19, 30, 38 and 46.

Appln No. 09/578,355

Amdt date February 23, 2004

Reply to Office action of October 22, 2003

As discussed above, Yanagawa discloses a sound field correcting apparatus that adjusts delay times of audio signals based on amplitudes of two channels (L_t and R_t).

Kuusama et al. refers to "a delay and level control unit," but does not teach or suggest that delay is adjusted according to distance. See, for example, column 4, lines 58 - 60.

In contrast with cited references, the invention of claims 19, 30, 38 and 46 provide structure and methods that may be used, for example, to adjust signals in accordance with the distance between speakers and a listener. Such structure and methods may be used, for example, to solve a problem in some conventional systems where sound heard by a listener is governed by the nearest speaker to the listener in the case where the listening position is not at the center of the speakers surrounding the listener. This problem may be common, for example, in the cabin of a vehicle.

In summary, independent claims 19, 30, 38 and 46 are not anticipated by or obvious in view of the cited references considered either separately or in combination. Accordingly, Applicants respectfully submit that independent claims 19, 30, 38 and 46 are patentable over these references.

Claims 20, 21, 23, 24 - 29, 31 - 37, 39 - 45 and 47 - 53 that depend on claims 19, 30, 38 and 46 also are patentable over the cited references for the reasons set forth above. In addition, these dependent claims are patentable over these references for the additional limitations that the dependent claims contain.

Appln No. 09/578,355

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SUMMARY

In view of the above amendment and remarks it is submitted that the claims are patentably distinct over the cited references and that all the rejections to the claims have been overcome. Reconsideration and reexamination of the above Application is requested.

Respectfully submitted,

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